

REMARKS/ARGUMENTS

Claims 11-20 and 22-23 are active.

Claim 11 is as follows:

A process for combating acarids in the storage of cereals, comprising placing the cereals in contact with a powder comprising more than 40% by weight of sodium bicarbonate, wherein said cereals are infested with acarids and wherein the powder has an acaricidal effect on the cereal.

The claims have been newly rejected under 35 USC 103(a) combining Mills and Montville (Claims 11, 13-17, 20, 22 and 23) further in view of Applying Pesticides Correctly (Claim 12), and further in view of Misato (Claims 18 and 19).

The basic premise of the rejection is that Mills teaches that sometimes fungi and mites (acarids) exist in combination in grains and Montville teaches treating fungi with sodium bicarbonate, the claimed method would have been inherent when one followed the teachings of Montville to treat fungi if that grain was also infested with acarids. (see pages 3-4 of the Action).

There are a number of problems with these rejections and Applicants cannot agree with their conclusions.

First, the legal requirement for inherency is necessity. *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323 (CCPA 1981). That is, the prior art teachings must, each and every time, achieve that which is claimed. The Applicant agrees that Mills teaches that grain mites (acarids) may occur in combination with *Aspergillus* spp. in stored cereals and oilseeds (Table 1). However, Mills also teaches in Fig 1 - Diagram G that:

- specific mites, such as Cheyletus, interact with other mites without interacting with fungi,
- other mites, as Acarus, directly eat the seed. Fig. 1G is also commented at page 332, column 2, second paragraph, in which Mills explains that mites feed on kernels, grain dust, or seed borne fungi.

Therefore Mills does not teach that fungi presence is necessary to acarids survival. And this fact is contradictory to the Examiner assertion that it would have been obvious to one of ordinary skill that using sodium bicarbonate as fungicide will inherently induce an effect on the acarids. In other words, as acarids do not require fungi for survival and it is only a possibility that fungi and acarids coexist, the legal requirement for inherency cannot be met.

The fact that acarids can live without noticeable fungi presence is also exemplified in present specification:

- in example 1: the control samples shows that Acarus mites that are introduced in clean Petri dishes without the presence of cereals, and so without noticeable associated fungi introduction lead to 98% of mites survival after 48 h. As the claimed process leads to 95% death in the same time.
- in example 2, similarly with Tyrophagus mites tests having no noticeable associated fungi introduction.

Claim 12 is separately rejected further in view of Applying Pesticides Correctly pertaining to placement of the sodium bicarbonate, something allegedly taught by this citation. Applying Pesticides Correctly, however, does not remedy the fact that Mills and Montville fail to teach, explicitly or inherently, the claimed method. Therefore, the combination of citations cannot render the claims obvious.

Claims 18 and 19 are separately rejected further in view of Misato pertaining to the presence of silica. Misato, however, does not remedy the fact that Mills and Montville fail to teach, explicitly or inherently, the claimed method. Further, Misato provides no teaching relevant to the treatment of acarids because like Montville, Misato only teaches fungicide effects. Therefore, the combination of citations cannot render the claims obvious.

The art cited does not teach treating acarid infested cereals, acarids are not fungi and as such there is no evidence in the citations in this Official Action that one would have reasonably expected that sodium bicarbonate would have worked on acarid infested cereals regardless of whether one considered sodium bicarbonate effective and safe for fungi.

The Action to which the present paper responds does not address this lack of reasonable expectation because the art is silent. As stated in *In re Sullivan*, 84 USPQ2d 1034 (Fed. Cir. 2007):

It is well settled that the PTO “bears the initial burden of presenting a prima facie case of unpatentability.... However, when a prima facie case is made, the burden shifts to the applicant to come forward with evidence and/or argument supporting patentability.” *In re Glaug*, 283 F.3d 1335, 1338 (Fed. Cir. 2002). Rebuttal evidence is “merely a showing of facts supporting the opposite conclusion.” *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Evidence rebutting a prima facie case of obviousness can include: “evidence of unexpected results,” *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1369 (Fed. Cir. 2007), evidence “that the prior art teaches away from the claimed invention in any material respect,” *In re Peterson*, 315 F.3d 1325, 1331 (Fed. Cir. 2003), and evidence of secondary considerations, such as commercial success and long-felt but unresolved needs, *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999). When a patent applicant puts forth rebuttal evidence, the Board must consider that evidence. See *In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995) (stating that “all evidence of nonobviousness must be considered when assessing patentability”); *In re Sernaker*, 702 F.2d 989, 996 (Fed. Cir. 1983) (“If, however, a patent applicant presents evidence relating to these secondary considerations, the board must always consider such evidence in connection with the determination of obviousness.”).

Rather than considering Applicants' showing of results as rebuttal evidence to an alleged *prima facie* case, the Examiner appears to have not addressed it presumably because unexpected results cannot exist when a *prima facie* case has allegedly been made.

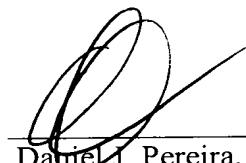
In addition to their showing that there is no *prima facie* case, Applicants have shown that acarids can be treated in the manner that is claimed that would not have been reasonably expected from the cited prior art teachings of fungicides. The Examiner has put forth no reasoning that would support a conclusion that, *looking forward*, such an improvement would have been reasonably expected from the combination of citations. Rather, it appears that the Examiner looks backwards and concludes that because it is her opinion that the references present a *prima facie* case any property, benefit, or characteristic of the invention Applicant wishes to discuss in rebuttal is not probative. See MPEP 716.02(e) and *In re Chapman*, 357 F.2d 418, 148 USPQ 711 (CCPA 1966).

Withdrawal of the rejections applied under 35 USC 103(a) is requested.

A Notice of Allowance without further delay is kindly requested.

Respectfully submitted,

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